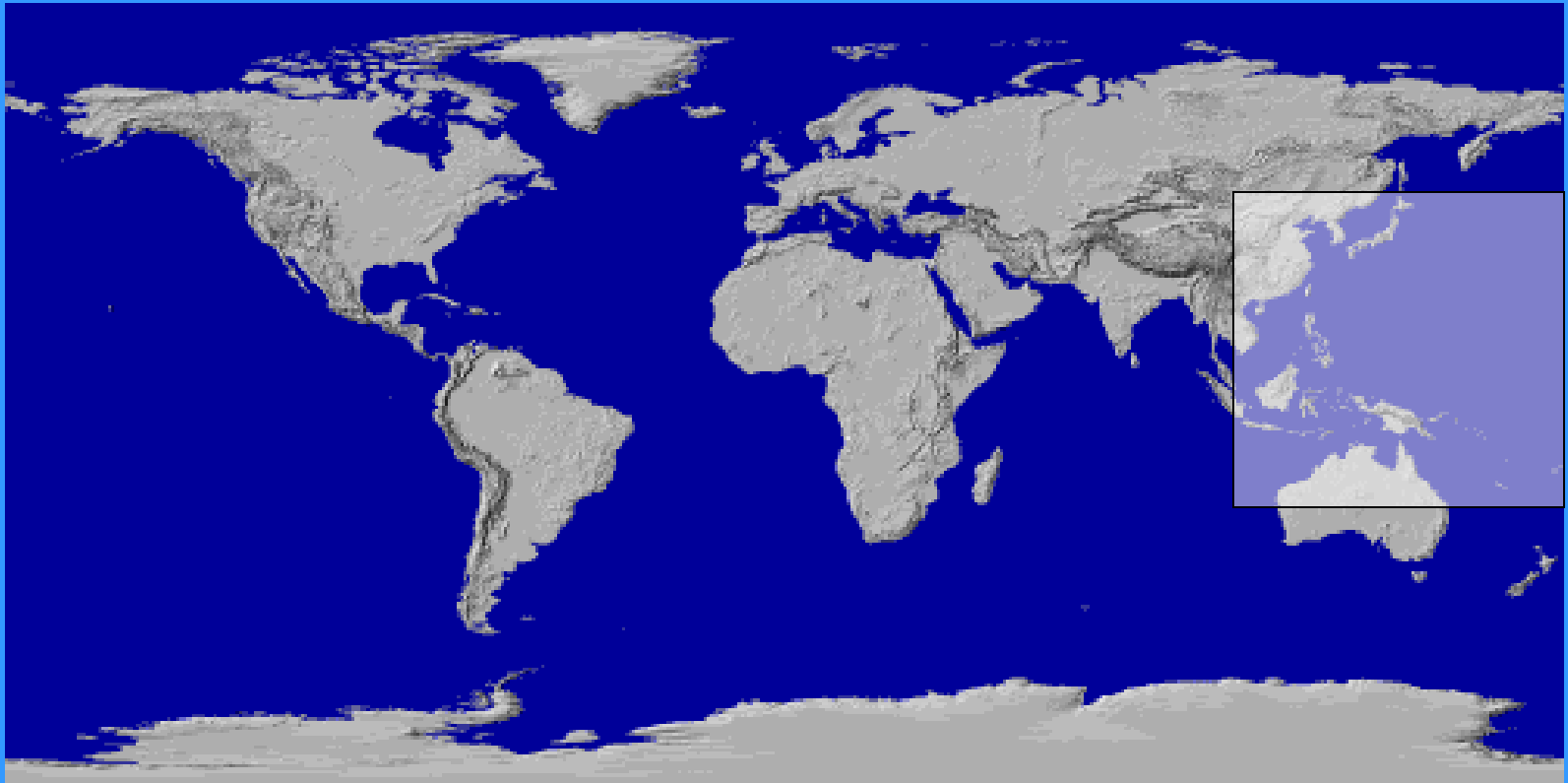


# A Study of Geography and Topography of the Western Pacific/East Asia



# References

- SEVENTH Fleet AOR Forecasters Handbook (02/98)
- Forecasters Handbook for Yokosuka Japan
- NAVPACMETOCCEN Web Site
- <http://www.peakware.com/encyclopedia/ranges/maps>



- The physical structure of eastern Asia and ocean areas play a significant role in influencing METOC over the West Pacific region.
- A careful study of the topography of eastern Asia is essential to successful forecasting.

# West Pacific/East Asia Geography/Topography

Do you know where  
these places are?



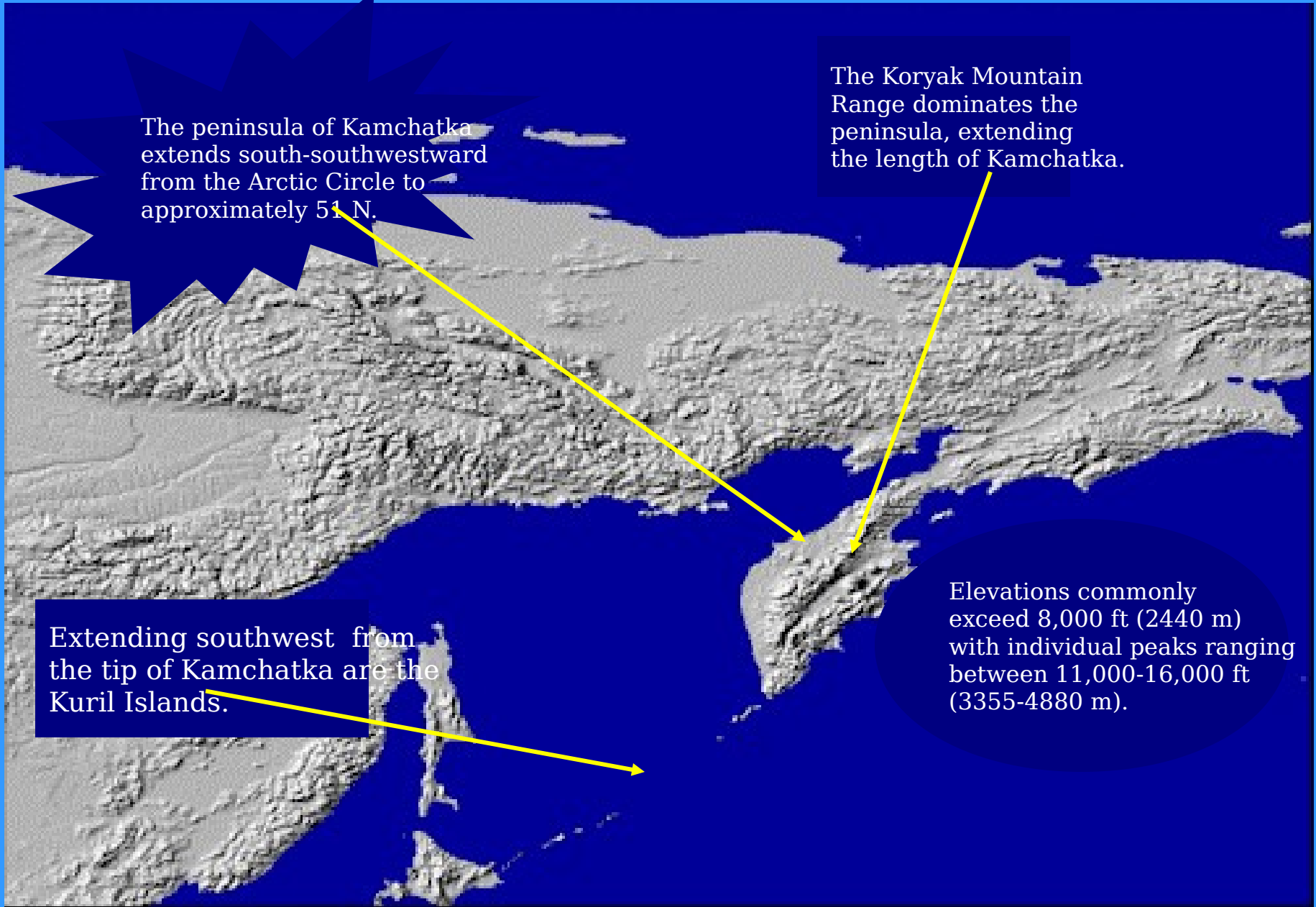
# Kamchatka and the Kuril islands

The peninsula of Kamchatka extends south-southwestward from the Arctic Circle to approximately 51° N.

The Koryak Mountain Range dominates the peninsula, extending the length of Kamchatka.

Extending southwest from the tip of Kamchatka are the Kuril Islands.

Elevations commonly exceed 8,000 ft (2440 m) with individual peaks ranging between 11,000-16,000 ft (3355-4880 m).



# Siberia (Russia)

The Siberian Plateau extends from the Verkhoyansk Range (135° E) to the Ural Mountains (60° E).

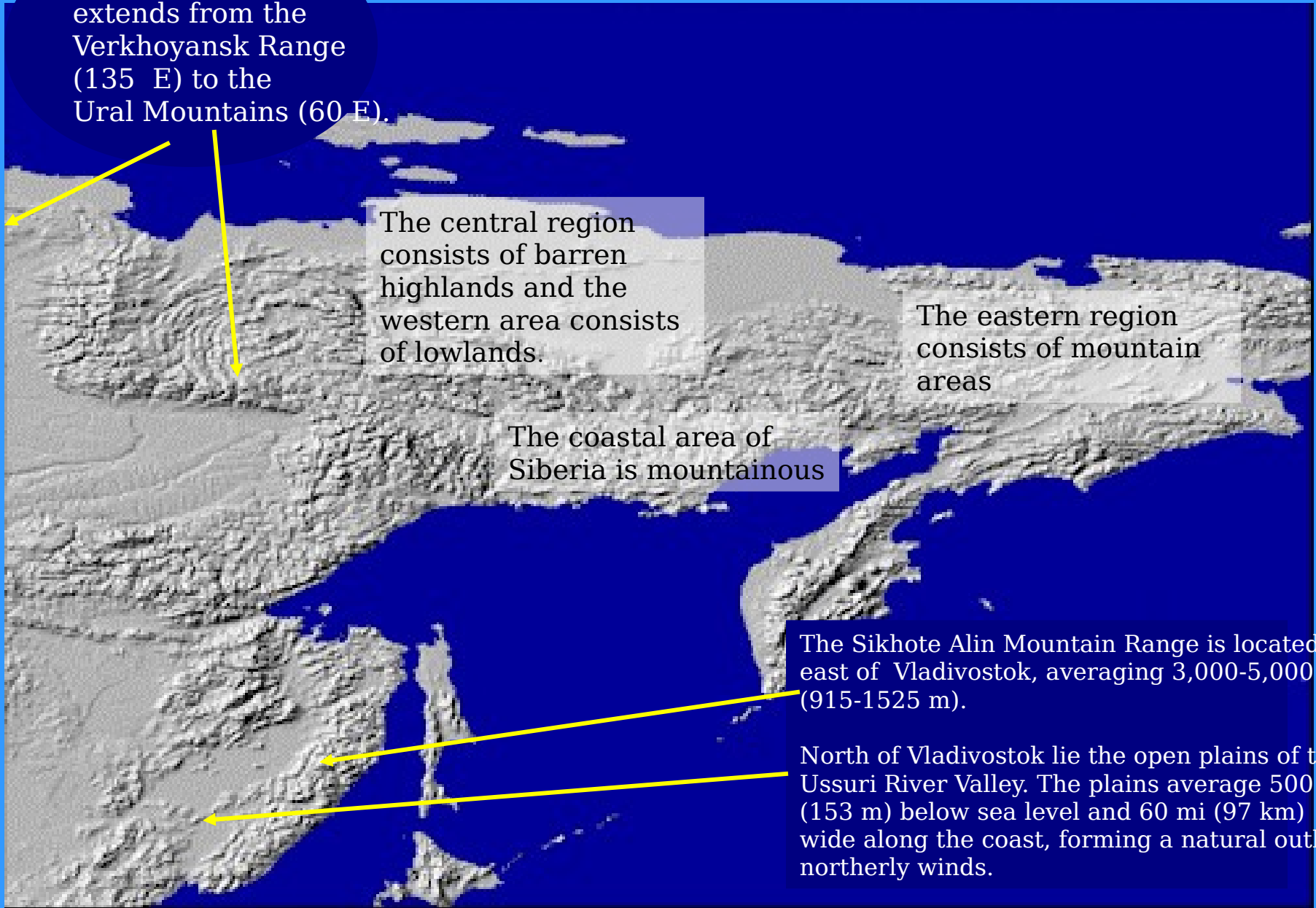
The central region consists of barren highlands and the western area consists of lowlands.

The eastern region consists of mountain areas

The coastal area of Siberia is mountainous

The Sikhote Alin Mountain Range is located north east of Vladivostok, averaging 3,000-5,000 ft (915-1525 m).

North of Vladivostok lie the open plains of the Ussuri River Valley. The plains average 500 ft (153 m) below sea level and 60 mi (97 km) wide along the coast, forming a natural outlet for northerly winds.



# Japan

A topographic map of Japan, showing the four main islands: Hokkaido, Honshu, Shikoku, and Kyushu. The map is rendered in shades of gray, highlighting the mountainous terrain. Several callout boxes with white text and arrows point to specific geographical features. The background of the slide is a solid blue color.

Four-fifths of the country is mountainous, including approximately 165 volcanoes (45 of which are still active).

The mountains of Hokkaido constitute the second major chain, averaging 5,000-6,000 ft (1525-1830 m)

The third chain is found on the island of Kyushu, averaging only 5,000 ft (1525 m)

The Ryukyu Island chain forms a 750 mi (1208 km) arc between Japan's southern most main island of Kyushu and the northern most tip of the island of Taiwan.

This island chain forms a natural boundary between the East China Sea to the west and the

The Japan Alps, located in the central region of Honshu, is the major mountain chain of the Japanese islands, averaging 5,000-12,000 ft (1525-3660 m) in elevation.

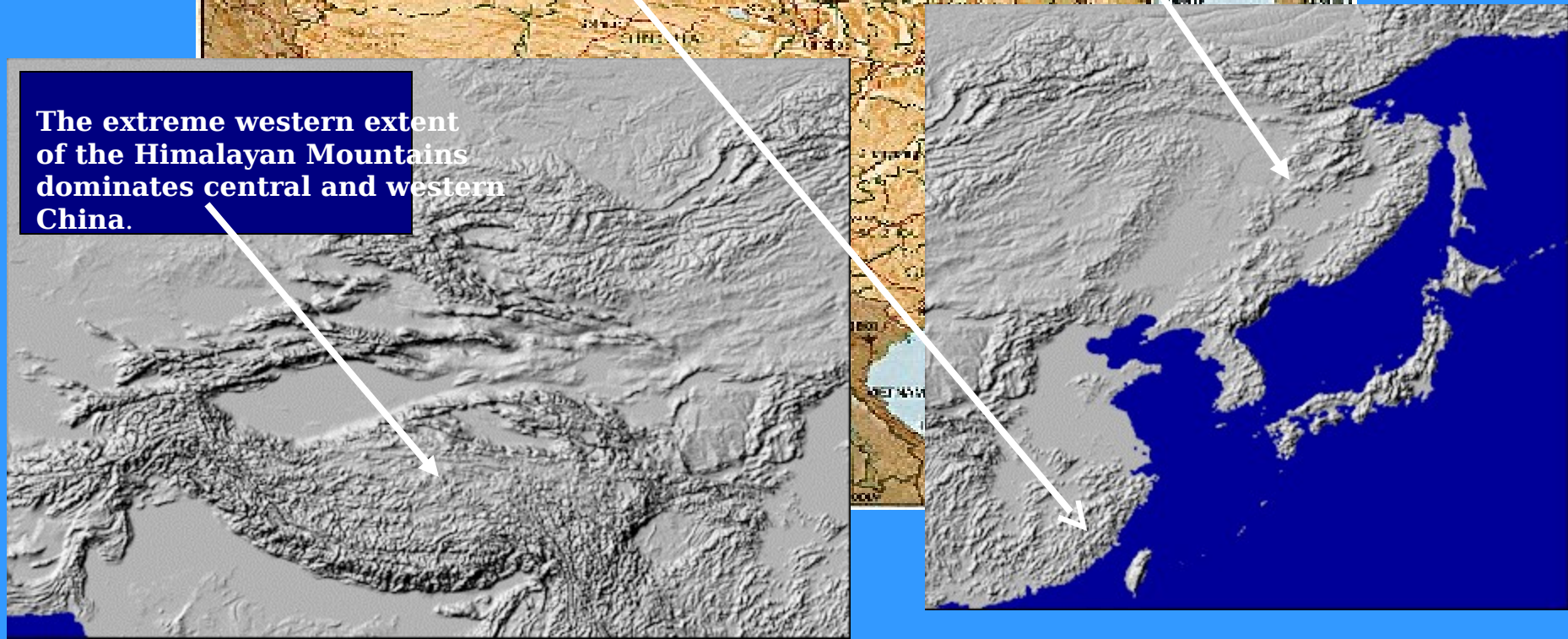


# China

The Coastal areas of eastern mainland China are made up of extensive low-lying mountain ranges, which have elevations commonly below 3,000 ft (915 m).

The Manchurian Plain extends from the foothills of the Nangrim Range to the greater Khingan Range on the eastern edge of the Gobi Desert.

The extreme western extent of the Himalayan Mountains dominates central and western China.





# Mongolia

**Mongolia lies in central Asia with Russia to the north and China to the south.**

**The Gobi Dessert, in the southeast region, supports no vegetation and is sparsely populated.**

**Funneling of winds between the ranges of western Mongolia and Manchuria can cause strong winds over the desert area.**

**Airborne sand has been observed as far away as the Yellow Sea and the Sea of Japan.**

## China

**The northern extension of the Himalayans dominates the terrain of northwestern Mongolia.**

Mongolia

# Korea

The Korean Peninsula extends 600 mi (966 km) from 44°N to 33°N and has a total area, including off-shore islands, of 75,250 sq. mi (194,899 sq. km). The Peninsula extends to within 120 mi (193 km) of Honshu.

North Korea extends about 445 mi (716 km) from the southwest to the northeast and is approximately 225 mi (362 km) wide.

About 80% of North Korea is mountain ranges and uplands. The Kaema Plateau, average elevation 3,280 ft (1,000 m), bisects the country.

The Hamgyong Mountains rim the eastern edge of the plateau, rising to over 8,200 ft (2,501 m).

This map depicts South Korea as viewed from 512,000 feet (156 KM). Terrain coloring is used to accentuate elevation, not a snowline.

South Korea also has an abundance of mountain ranges—approximately 70% of the total landmass.

The main range, the Taebaek Mountains, roughly parallels the east coast.

The other four major ranges (the Charyong, the Kwangju, the Sobaek and the Noryong) form 90 degree angles from the Taebaek Mountains. Most of the lowlands are located in the western portion of the Peninsula.

Cheju

Sobaek



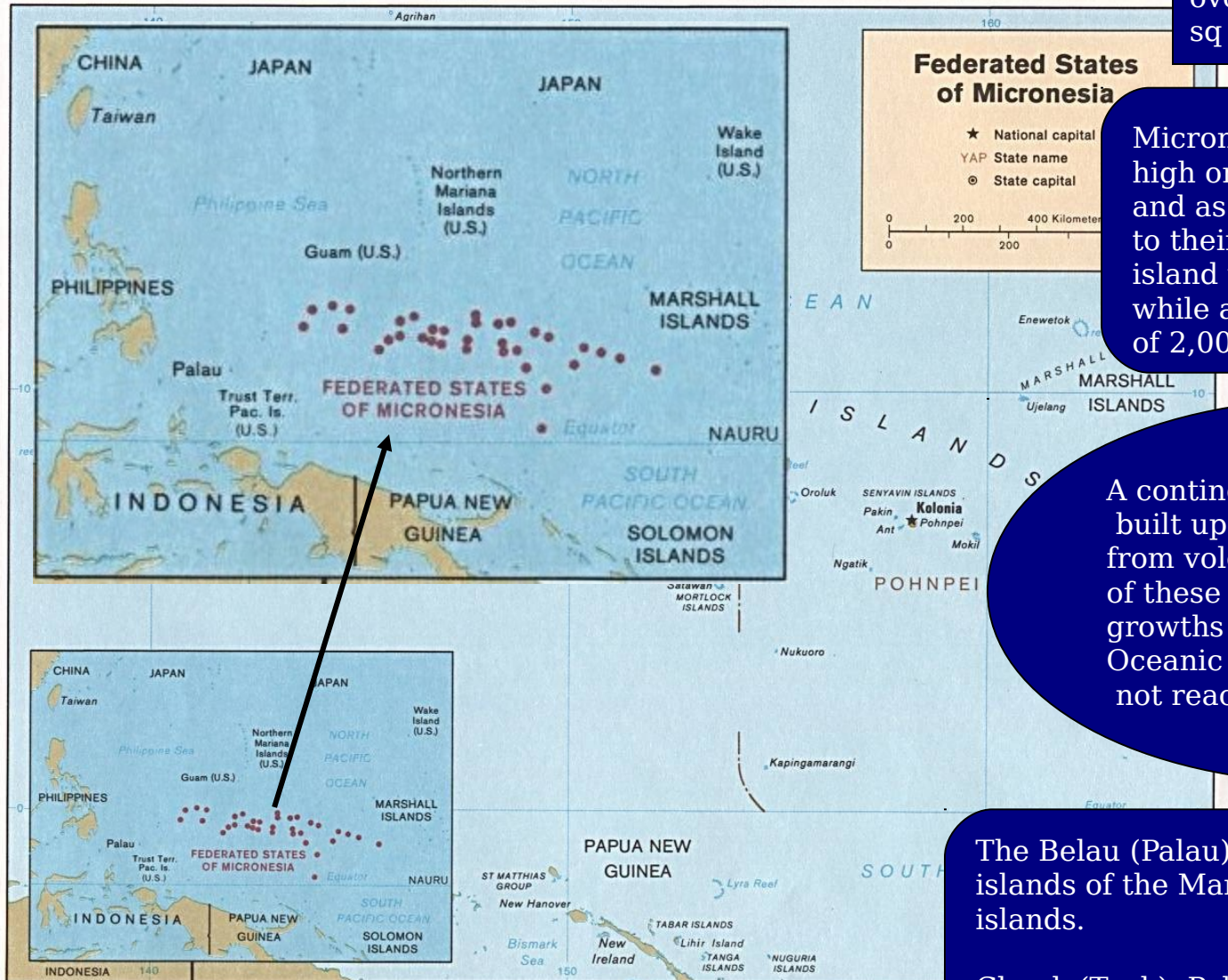
Taiwan is mostly mountainous, with peaks of 12,743 ft (3,887 m) and 13,114 (4,000 m) in the northern and central areas of the island.





# Micronesia

Micronesia consists of more than 2,000 islands and islets, a total land area of 1,100 sq mi (2,849 sq km) spread over an ocean area of 2.5 million sq mi (6.5 million sq km).



Micronesian islands are classified as high or low, depending on their elevation, and as continental or oceanic according to their geological substructure. A low island will have an elevation of a few feet, while a high island may have an elevation of 2,000 ft (610 m).

A continental island has a substructure built upon piles of lava that have been formed from volcanic fissures in the sea floor. Many of these islands are ringed or topped by coral growths forming varying types of outer reefs. Oceanic islands have a substructure that does not reach the surface.

The Belau (Palau) group, Yap, and the southern part of the Mariana Islands are examples of continental islands.

Chuuk (Truk), Pohnpei and Kosrae in the Eastern Carolines are examples of oceanic high islands. The remaining Micronesian islands are classified as low oceanic islands.



The Philippine islands consist of more than 7,000 individual islands. The islands are grouped into three regions: the Luzon region in the north, the Visayas region in the center and the Mindanao region in the south.

Many of the larger islands have narrow coastal plains and interior highlands and mountain ranges. These ranges, generally oriented north and south, cover almost the entire length of the islands.

Many of the larger islands within the Visayas region have ranges that extend their entire length.

Mindanao has extensive mountain ranges dominating the eastern and western areas, with a third range dividing the



**A lot to know, but  
essential**

**Expert weather  
observers and  
forecasters know the  
landscape**

